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2011 Regional Corn Report

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Grain and Feed

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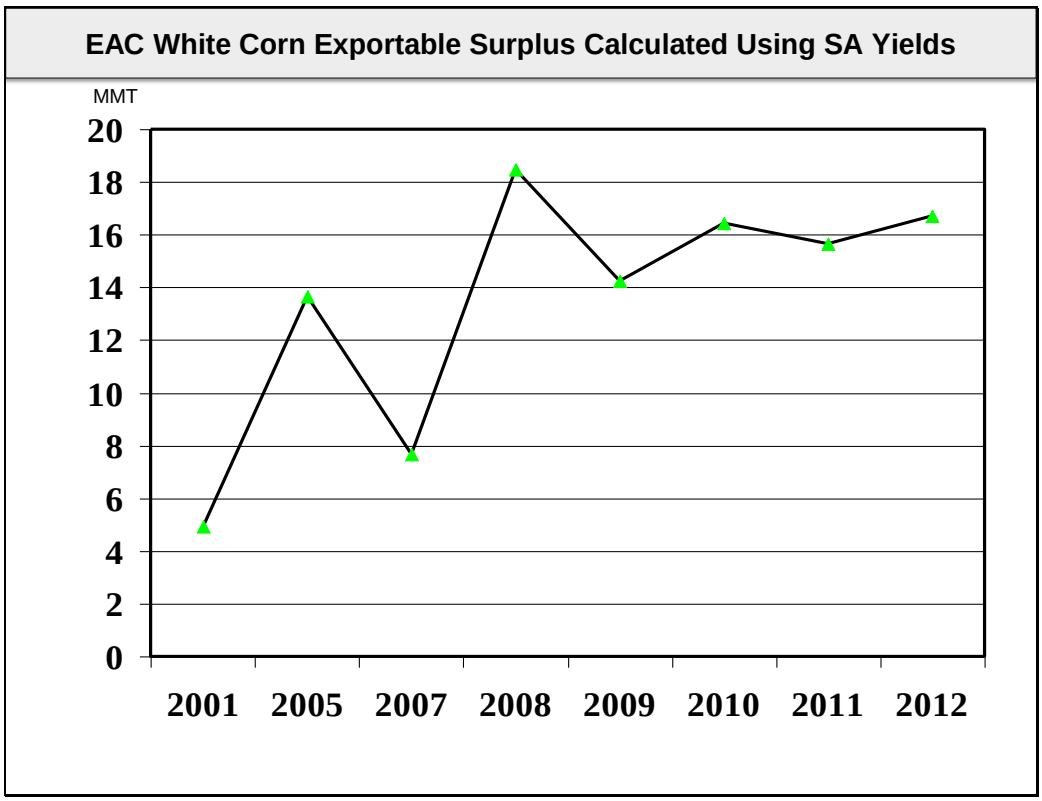
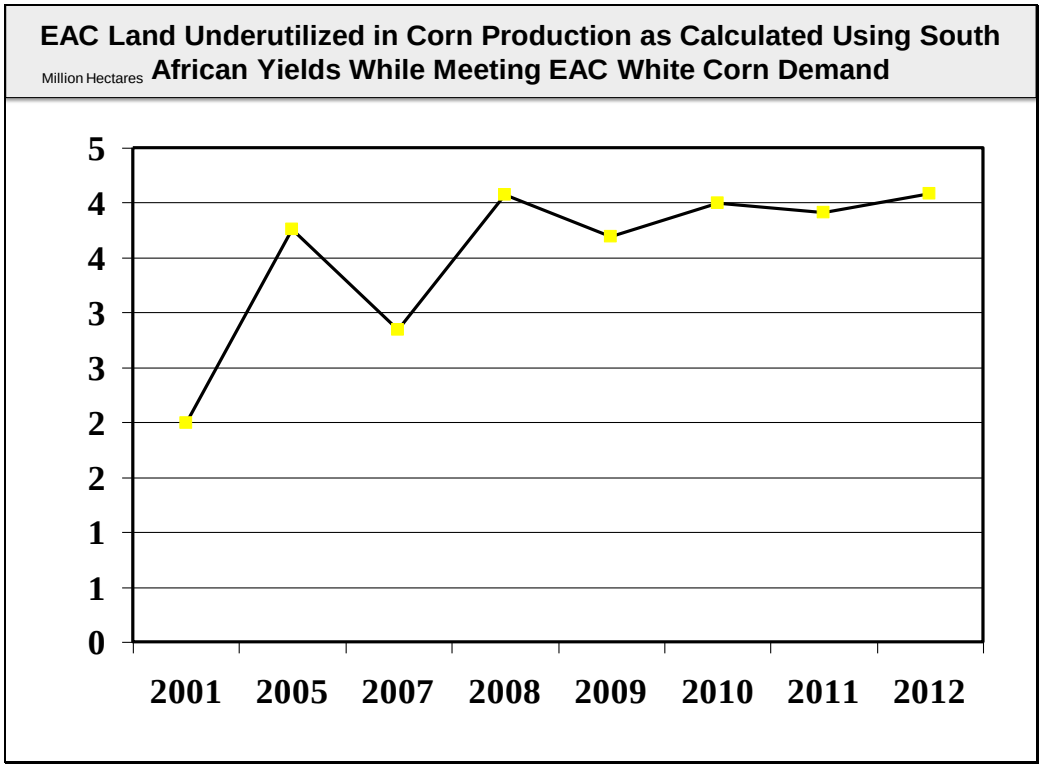
Report Highlights:
Instead of producing just enough (on average about nine million metric tons per annum) white corn for human consumption in the East African Community (EAC), EAC corn growers could, on the same land surface, produce just under a 20 million metric ton exportable-surplus per year (in excess of domestic demand), enough to feed about 325 million people at the rate of 700 calories/person/day for an entire year (Kenyans currently consume at this level). In addition to establishing new-crop, marketing-year 2012 white corn supply and demand forecasts, this report will serve to define the economic incentives that guide EAC white-corn growers to produce an average of 1.5 metric tons of white corn per hectare or about nine million tons per year instead of adopting South African production techniques that could improve yields to over four metric tons per hectare.



Data Source Notes: MY2012 FAS/Nairobi Forecasts; MY2011 Trade Estimates; MY2001-2010 Trade Estimates from GTA, Area Harvested and Production to calculate Yields from the Ministries of Agriculture



Data Source Notes: MY2011 and 2012 FAS/Nairobi Estimate and Forecasts—Prior Years Ministries of Agriculture and USDA/Washington Data

Executive Summary:

Analysts worldwide have begun to sound the alarm that the world is running out of food. They point to climate change, the loss of productive agricultural land to non-agricultural uses, etc. as important factors that diminish food-grain production potential, which when factored in with increasing demand for food due to high birth rates in developing countries and the use of agricultural commodities for renewable fuel production in economically advanced countries, lead to record-setting high commodity prices on shorter-interval cycles than in the past, i.e. record-setting price levels in 2008 and encore in 2011.

While many EAC watchers speak of a chronic food shortage in the EAC region, the "chronic shortage" may be nothing more or less than EAC corn farmers responding to the market signals that result from local production and demand, as well as Government and EAC tariff policy. Those policies permit EAC producers to use land in a "low productivity" mode by protecting growers from the exports of lower-cost producers that have adopted more advanced "high productivity" production technologies and techniques, i.e. producers in South Africa, Argentina, Europe and the United States.

Under the current incentives, EAC white corn producers benefit most when they produce white corn for human consumption at "chronic food shortage" levels. However, EAC producers could very quickly adopt new techniques and technologies that would vault yields if farm-gate economics were conducive. EAC producers have productive land, generally sufficient rain fall and unbeatable growing seasons to produce far more than they now produce (Please see the graph here below comparing production in East Africa vs. South Africa).

EAC Tariff Policy Isolates Producers from Competition: Pricing; Production; and Trade

The EAC white-corn producers remain isolated from the world corn supply and demand, and resulting world prices, because of the tariff wall created by the EAC's 50 percent ad-valorem tariff rate on imported corn for human or animal consumption. The varying height of the tariff wall protects EAC corn farmers from all non-EAC corn exports, but in terms of application, it remains most effective against imports through the ports of Dar Es Salaam, Tanzania, and Mombasa, Kenya, where corn from the world's most efficient producers would enter the EAC market if not for the tariff.

Because revenue authorities calculate the tariff using the commodity cost as one of the factors, there are only two scenarios when EAC corn imports could occur: 1) The EAC abates the 50 percent ad-valorem tariff; or, 2) domestic EAC corn prices exceed the cost, insurance, and freight (CIF) value of imported white corn plus an additional 50 percent of the CIF value of the imported corn.

EAC Farm-Gate Price Signals in an Isolated Market

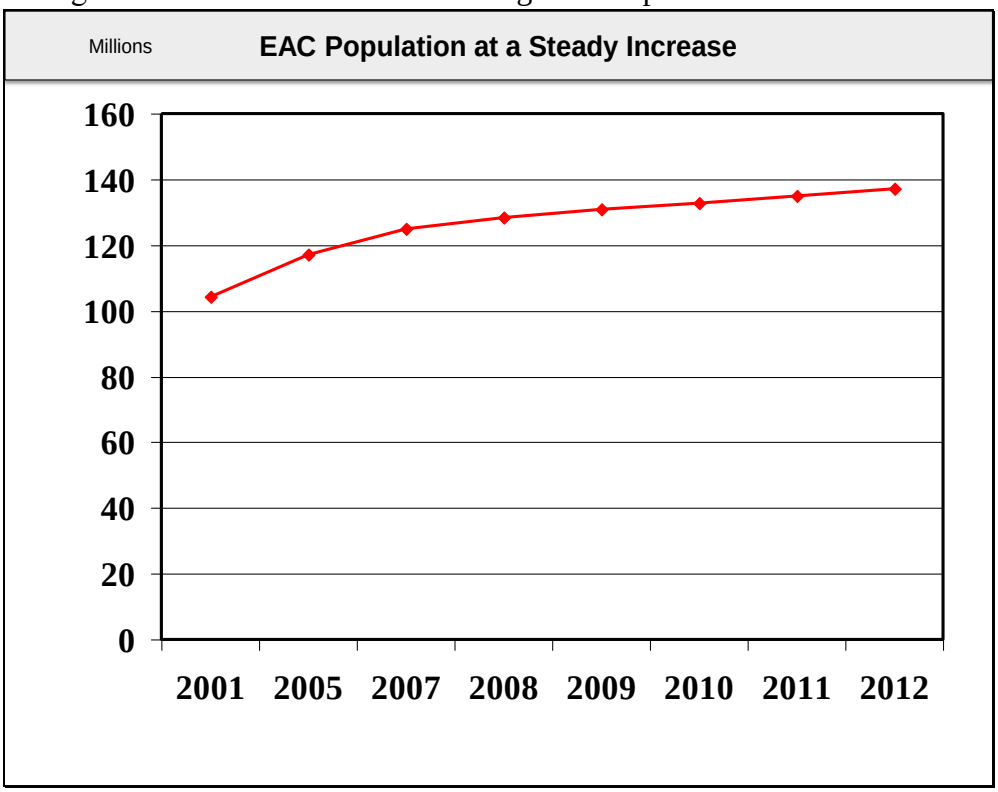
As a result of this isolation, notwithstanding the current record or near-record high world-market corn prices, EAC white-corn farmers will not likely increase the acreage dedicated to white-corn production (in response to record world prices) and will only increase average yields modestly, because of a forecast uptick in Kenyan production due to the Government of Kenya's (GOK) attempts to subsidize corn seed and fertilizer. EAC domestic corn producers read about record-high world-market corn prices in the local newspaper and on text messages, hear about them from neighbors and on the local radio, but at the farm level, the price they receive depends on local conditions only.

Within the EAC, the local domestic farm-gate white corn price, isolated as it is from the world market, will be determined on the basis of local production (supply) and local demand (consumption). The tariff wall excludes potential imports to augment the supply side of the equation but because there isn't a ready market for white corn for human consumption outside the EAC, exports can be excluded from the demand side of the equation. With the exception of exports to South Sudan and the DRC, all corn produced within the EC will likely be "consumed" within the EAC.

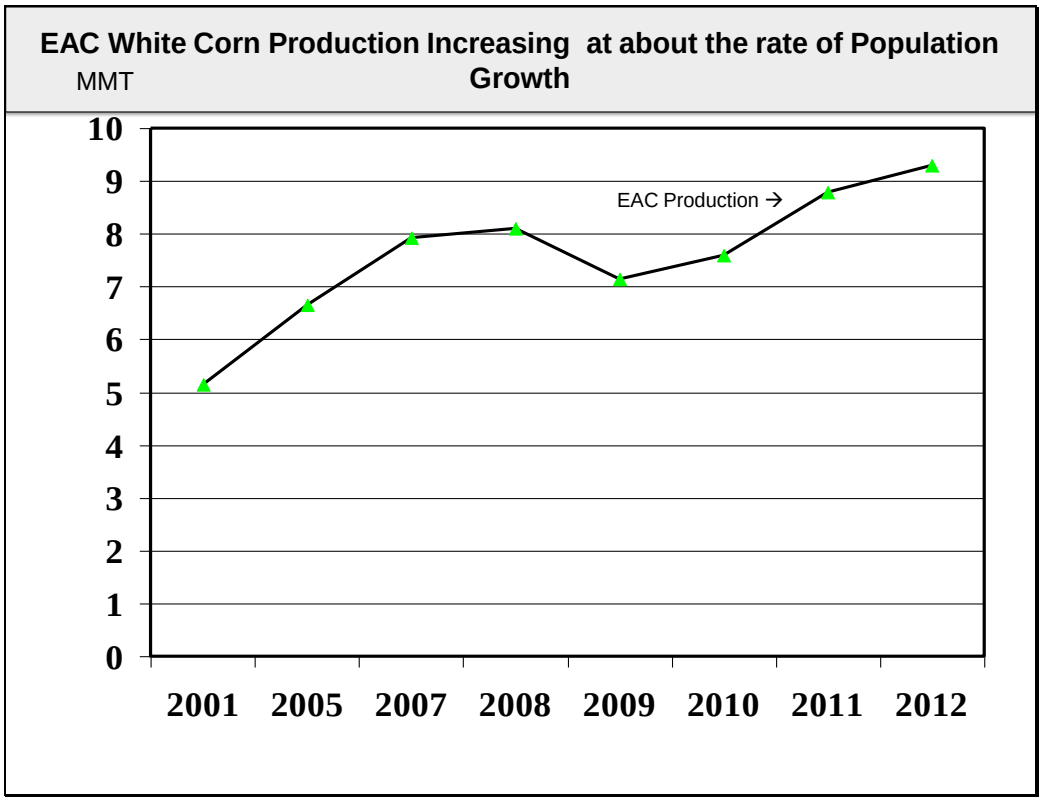
The farm-gate price will further be defined by the basis (other additional costs) costs of getting that production to the final consumer. As a result of the isolation, producers know that when they under supply the domestic market, their farm gate prices can rocket up to levels equal to the cost of corn CIF-Mombasa plus 50 percent minus the basis. They also know that when they oversupply the domestic market, prices can plummet, because there isn't an export market for EAC-produced white corn for human consumption. The surplus will most likely go the feed-grain market at much reduced prices.

EAC Population vis-à-vis Production

EAC corn farmers collectively are not interested, then, in increasing white corn production at a rate greater than the population growth rate. This isolation from the world market has the perverse effect of discouraging EAC corn farmers (collectively) from taking on new and more productive techniques that would lead to higher yields. They must produce just enough corn to feed the family, while limiting the variable expenses with the full knowledge and experience that production over the "chronic food shortage" level will decimate local farm-gate corn prices.



Data Source Notes: MY2011 and 2012 FAS/Nairobi Forecasts otherwise Government Census Estimates



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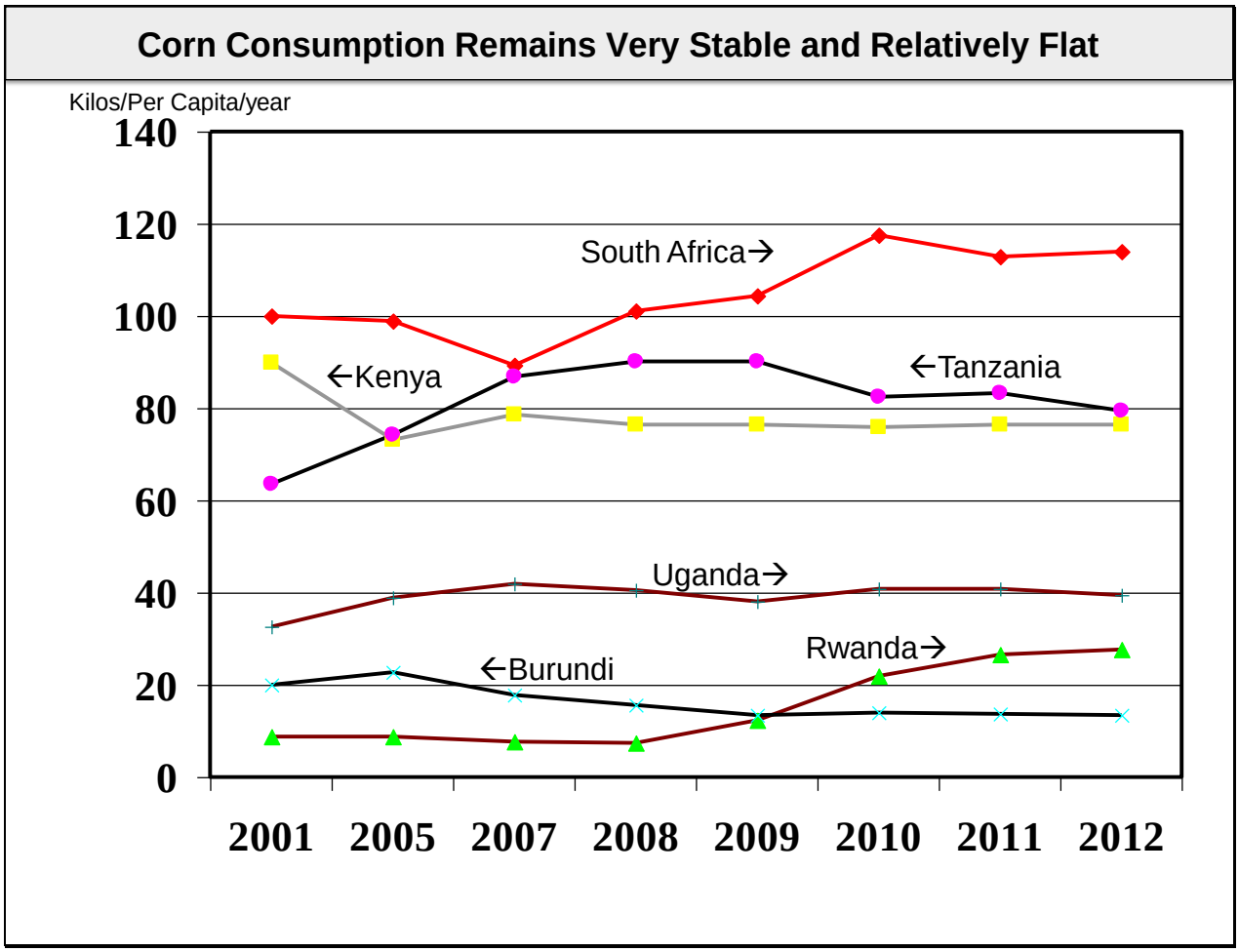

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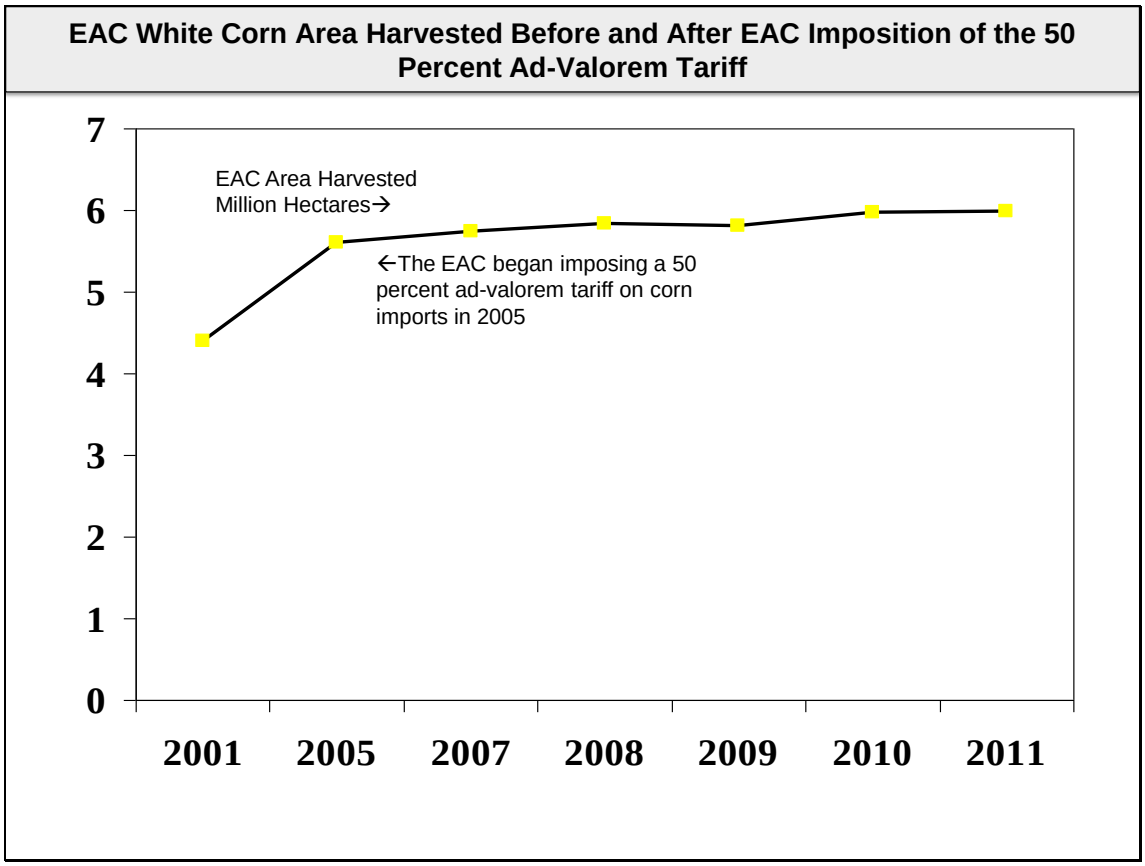
Slightly shorting EAC white corn demand, thus creating the "chronic food shortage," but not shorting it enough to trigger the GOK abating the 50 percent ad-valorem tariff, provides the best economic returns for EAC producers. This cost-minimizing, profit maximizing approach to production in the EAC leads to average yields of 1.5 metric tons per hectare (please see the EAC PS& D Table below) and the best long-term economic returns on investment. Higher yields and production decimate local farm-gate prices.



Data Source Notes: MY2011 and 2012 FAS/Nairobi Estimate and Forecasts—Prior Years Ministries of Agriculture and USDA/Washington Data

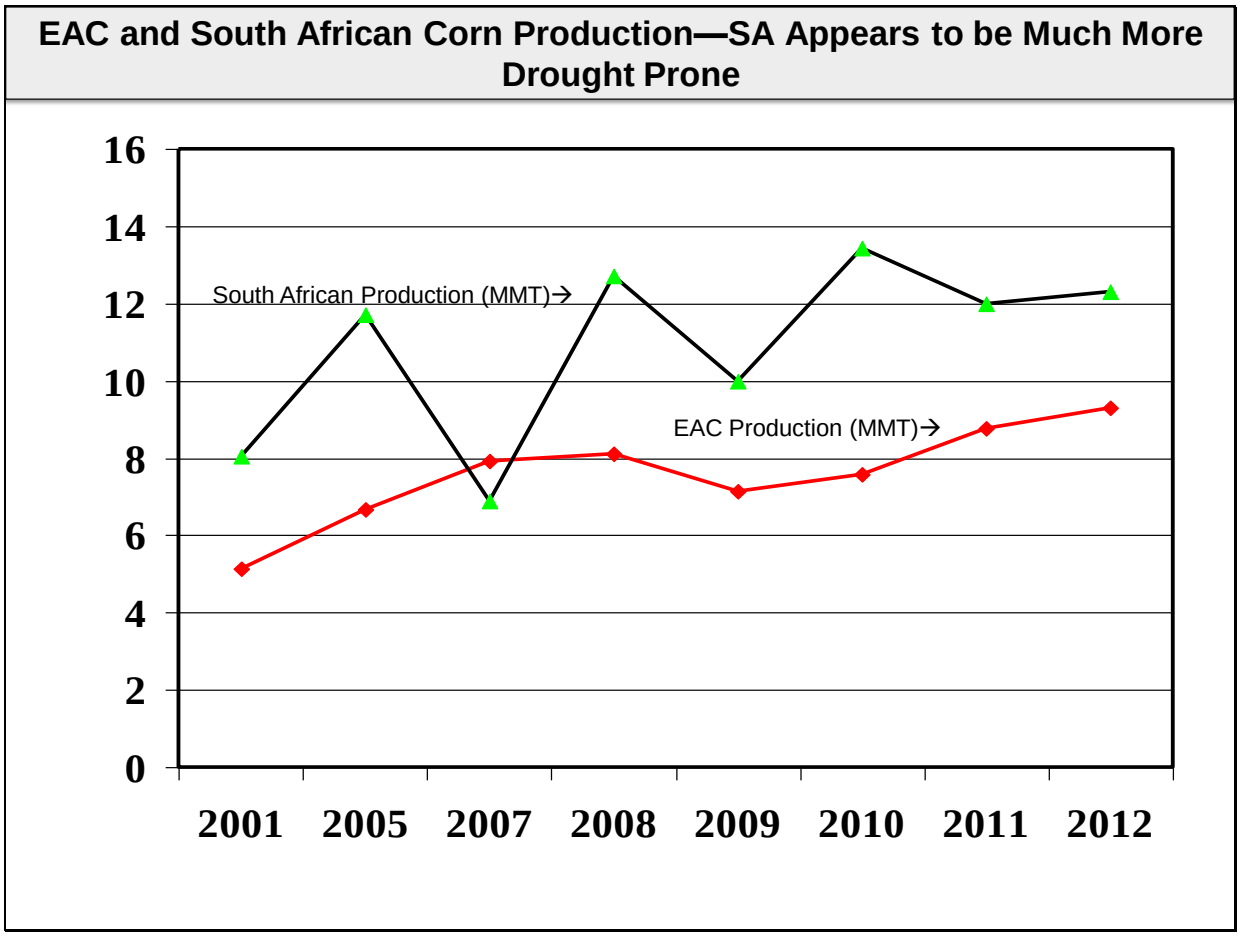
Corn EAC*	2010		2011		2012	
	2009/2010		2010/2011		2011/2012	
	Market Year Begins: Jul 2009		Market Year Begins: Jul 2010		Market Year Begins: Jul 2011	
	USDA Country Data Summed	New Post	USDA Country Data Summed USDA Sum	New Post	USDA Country Data Summed USDA Sum	New Post
Area Harvested	6,015	5,965	6,039	5,989	0	6,089
Beginning Stocks	640	643	443	450	0	595
Production	7,284	7,584	8,710	8,970	0	9,290
MY Imports	1000	700	300	100	0	10
TY Imports	1000	400	300	100	0	10
TY Imp. from U.S.	0	0.1	0	0	0	0
Total Supply	8,924	8,927	9,453	9,520	0	9,895
MY Exports	60	101	75	130	0	105
TY Exports	60	101	75	130	0	105
Feed Consumption	275	275	275	475	0	475
FSI Consumption	8146	8101	8395	8320	0	8254
Total Consumption	8,421	8,376	8,670	8,795	0	8,729
Ending Stocks	443	450	708	595	0	1061
Total Distribution	8,924	8,927	9,453	9,520	0	9,895
Yield	1.21	1.27	1.44	1.50	NA	1.53
* 1,000 HA; 1,000 MT; Marketing Year (MY) (Jul/Jun); Trade Year (TY) (Oct/Sep)						

South Africa—A Recent Case of Oversupplying the Market

Take the case of South African corn producers, who during MY 2010 produced a near-record high white corn crop. South African producers, while producing at much higher yields than EAC farmers, also produce for the local market and even though somewhat better established to export into the sub-Saharan region, face almost identical challenges to those of EAC producers when it comes to marketing exportable white corn surpluses. Please note the following excerpts from a Bloomberg report entitled: **Price of Success for S. Africa Corn Farmers Is Ruin** By Carli Lourens - May 17, 2010 6:05 PM GMT+0300. "South Africa's corn farmers, buoyed by unexpectedly good rains… are preparing to reap their biggest crop in 28 years. The reward for their success may be bankruptcy…The government's Crop Estimates Committee will confirm…estimated harvest of 13.1 million metric tons…The resultant [exportable] surplus, estimated by Grain SA at a record 4 million tons, may "destroy" the industry, threatening the country's food security, Agriculture Minister Tina Joemat- Pettersson said last month. The price of the most commonly traded type of corn on the South African Futures Exchange slid to a four-year low this year as traders anticipate a glut.

"We're going to lose farmers," Kobus Laubscher, general manager of Grain SA, the country's biggest grain farmers' group, said by phone from Bothaville, in the corn-growing central Free State Province. "We don't want to cry wolf, but we have to now fight for the sustainability of future production"…With

an ageing rail system that prioritizes moving higher value coal and iron ore to ports, South Africa's corn farmers have to largely rely on consumption in their home market and neighboring countries…The odds of finding a market are stacked against them…at the same time, many countries in southern Africa have benefited from the same abundant rains...The local market offers little scope to take up the surplus, Laubscher said. Per capita consumption will decline to about 80 kilograms (176 pounds) in the year through March 2011 from about 88 kilograms in 2008, the Department of Agriculture estimates…a lot of people are going to go out of business," said Thomas Mehl, an analyst at Pretoria-based trader Grainvest Futures. "There are going to be bankruptcies at the level of prices we're seeing"…Farmers are looking at all options to sell the unwanted [exportable] surplus, including forming a pool of corn dedicated solely to exports…South African corn may be too expensive to export in large quantities given the cost of freight over the long distances to markets on other continents…The most heavily traded contract for white corn fell 2.4 percent to the equivalent of about $143 a ton in Johannesburg today, while the benchmark corn contract in Chicago traded at about $141. In Argentina, which sells corn to African nations, the grain trades at about $120 a ton…"South African corn is just too expensive to be really competitive in the international market," said Wouter Mentz, the former chief executive officer of South Africa's biggest publicly traded corn trader Afgri Ltd. "There just isn't enough market for the price at which corn currently trades"…while bad news for farmers, the grain glut may keep inflation down. On May 13, central bank governor Gill Marcus said food-price inflation will probably slow because of the slump in the cost of corn…Their numbers (farmers) have fallen to 35,0000 from 60,000 10 years ago, Neels Ferreira, the chairman of Grain SA said...Quit Farming…We are seriously worried," Ferreira said. "That's why people decide they can't live with this uncertainty and quit farming."



Data Source Notes: MY2011 and 2012 FAS/Nairobi Estimate and Forecasts—Prior Years Ministries of Agriculture and USDA/Washington Data

If EAC white corn producers adopted South African production techniques, they could produce enough white corn to satisfy domestic consumption at current rates on about four million less hectares (please see graph below) or on the same land mass, they could produce just under 20 million tons of exportable surplus per year (please see the graph above). But, other than depressing domestic corn prices, what would they have accomplished? Where could they market 20 million tons of white corn at prices acceptable to producers?

An answer to the question of what crop might draw EAC small-holder farmers away from producing white corn has not yet been fully understood. Domestic support policy options could be employed to bring production of crops, other than white corn, on land where EAC growers are now planting corn. The EAC has distorted corn production within the EAC using the 50 percent ad-valorem tariff and could either reverse that action or attempt some further distortion in production to provide more food to the EAC market. However, a continuing use of the ad-valorem tariff will likely mean that EAC farmers continue to produce white corn at the currently low end of production technology, assuring sufficient household food while limiting further economic exposure.

The following tables present forecast MY 2012 supply and demand at the EAC Member State level, the sum of which equates to the EAC corn supply and demand table presented at the beginning of the

Supply and Demand Reports by Country

Corn Kenya*	2010		2011		2012	
	2009/2010		2010/2011		2011/2012	
	Market Year Begins: Jul 2009		Market Year Begins: Jul 2010		Market Year Begins: Jul 2011	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	1,800	1,750	1,800	1,750	0	1,800
Beginning Stocks	349	349	139	168	0	313
Production	1,900	2,200	3,000	3,400	0	3,800
MY Imports	1000	700	300	100	0	10
TY Imports	1000	400	300	100	0	10
TY Imp. from U.S.	0	0	0	0	0	0
Total Supply	3,249	3,249	3,439	3,668	0	4,123
MY Exports	10	1	25	5	0	5
TY Exports	10	1	25	5	0	5
Feed Consumption	100	100	100	300	0	300
FSI Consumption	3,000	2,980	3,000	3,050	0	3,100
Total Consumption	3,100	3,080	3,100	3,350	0	3,400
Ending Stocks	139	168	314	313	0	718
Total Distribution	3,249	3,249	3,439	3,668	0	4,123
Yield	1.06	1.26	1.67	1.94	NA	2.11
* 1,000 HA; 1,000 MT; Marketing Year (MY) (Jul/Jun); Trade Year (TY) (Oct/Sep)						

Corn Tanzania, United Republic of	2009/2010		2010/2011		2011/2012	
	Market Year Begin: Jul 2009		Market Year Begin: Jul 2010		Market Year Begin: Jul 2011	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	3,100	3,100	3,100	3,100	0	3,100
Beginning Stocks	244	244	95	95	0	120
Production	3,326	3,326	3,600	3,600	0	3,500
MY Imports	0	0	0	0	0	0
TY Imports	0	0	0	0	0	0
TY Imp. from U.S.	0	0	0	0	0	0
Total Supply	3,570	3,570	3,695	3,695	0	3,620
MY Exports	25	0	25	25	0	0
TY Exports	25	0	25	25	0	0
Feed and Residual	50	50	50	50	0	50
FSI Consumption	3,400	3,425	3,500	3,500	0	3,376
Total Consumption	3,450	3,475	3,550	3,550	0	3,426
Ending Stocks	95	95	120	120	0	194
Total Distribution	3,570	3,570	3,695	3,695	0	3,620
Yield	1.	1.0729	1.	1.1613	0	1.129
* 1,000 HA; 1,000 MT; Marketing Year (MY) (Jul/Jun); Trade Year (TY) (Oct/Sep)						

Corn Uganda	2009/2010		2010/2011		2011/2012	
	Market Year Begin: Oct 2009		Market Year Begin: Oct 2010		Market Year Begin: Oct 2011	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	850	850	850	850	0	900
Beginning Stocks	30	30	155	133	0	108
Production	1,650	1,653	1,550	1,550	0	1,550
MY Imports	0	0	0	0	0	0
TY Imports	0	0	0	0	0	0
TY Imp. from U.S.	0	0	0	0	0	0
Total Supply	1,680	1,683	1,705	1,683	0	1,658
MY Exports	25	100	25	100	0	100
TY Exports	25	100	25	100	0	100
Feed and Residual	100	100	100	100	0	100
FSI Consumption	1,400	1,350	1,400	1,375	0	1,358
Total Consumption	1,500	1,450	1,500	1,475	0	1,458
Ending Stocks	155	133	180	108	0	100
Total Distribution	1,680	1,683	1,705	1,683	0	1,658
Yield	2.	1.9447	2.	1.8235	0	1.7222

* 1,000 HA; 1,000 MT; Marketing Year (MY) (Jul/Jun); Trade Year (TY) (Oct/Sep)

Corn Rwanda*	2010		2011		2012	
	2009/2010		2010/2011		2011/2012	
	Market Year Begins: Jul 2009		Market Year Begins: Jul 2010		Market Year Begins: Jul 2011	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	150	150	174	174	0	174
Beginning Stocks	17	17	54	54	0	54
Production	287	287	440	300	0	320
MY Imports	0	0	0	0	0	0
TY Imports	0	0	0	0	0	0
TY Imp. from U.S.	0	0	0	0	0	0
Total Supply	304	304	494	354	0	374
MY Exports	0	0	0	0	0	0
TY Exports	0	0	0	0	0	0
Feed Consumption	25	25	25	25	0	25
FSI Consumption	225	225	375	275	0	300
Total Consumption	250	250	400	300	0	325
Ending Stocks	54	54	94	54	0	49
Total Distribution	304	304	494	354	0	374
Yield	1.91	1.91	2.53	1.72	NA	1.84

* 1,000 HA; 1,000 MT; Marketing Year (MY) (Jul/Jun); Trade Year (TY) (Oct/Sep)

Corn Burundi*	2010			2011			2012		
	2009/2010			2010/2011			2011/2012		
	Market Year Begins: Jul 2009			Market Year Begins: Jul 2010			Market Year Begins: Jul 2011		
	USDA Official		New Post	USDA Official		New Post	USDA Official		New Post
Area Harvested		115	115		115	115		0	115
Beginning Stocks		0	0		0	0		0	0
Production		121	121		120	120		0	120
MY Imports		0	0		0	0		0	0
TY Imports		0	0		0	0		0	0
TY Imp. from U.S.		0	0		0	0		0	0
Total Supply		121	121		120	120		0	120
MY Exports		0	0		0	0		0	0
TY Exports		0	0		0	0		0	0
Feed Consumption		0	0		0	0		0	0
FSI Consumption		121	121		120	120		0	120
Total Consumption		121	121		120	120		0	120
Ending Stocks		0	0		0	0		0	0
Total Distribution		121	121		120	120		0	120
Yield		1.05	1.05		1.04	1.04		NA	1.04

* 1,000 HA; 1,000 MT; Marketing Year (MY) (Jul/Jun); Trade Year (TY) (Oct/Sep)